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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,078	02/27/2004	Kazuya Hayashibe	SON-2938	5485
23353	7590	02/13/2006		
RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			EXAMINER FLORES RUIZ, DELMA R	
			ART UNIT 2828	PAPER NUMBER

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/787,078

Applicant(s)

HAYASHIBE ET AL.

Examiner

Delma R. Flores Ruiz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/04/04

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/797078, filed on 02/27/2004.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

*Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.*

**Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.**

### *Information Disclosure Statement*

The information disclosure statement (IDS) submitted on 06/10/2004 have been not considered by the examiner, because the applicant's don't send the English

translation of the Non patent Literature Document, a translation of the) Non patent Literature document application should be submitted.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

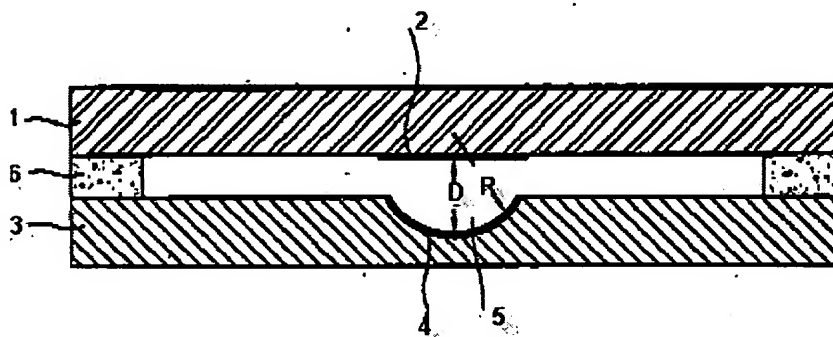
Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Yee (US 2004/0161193 A1).

***Regarding claim 1,*** Yee discloses in Figures 1 and 2 an optical resonator comprising: a first substrate (see Fig. 2 Character 1) and a second substrate (see Fig. 2, Character 3) which face each other, the first substrate (1) having a flat main surface on the side facing the second substrate (3) and the second substrate having a concave portion and a flat portion surrounding the concave portion on the side facing the first substrate; a first reflective mirror (see Fig. 2, Character 2) provided on the main surface

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of the first substrate (1); and a second reflective mirror (see Fig. 2, Character 4) provide at least on the surface of the concave portion, wherein the main surface of the first substrate and the flat portion of the second substrate are bondable (see Fig. 2, Character 6) .

Yee shown Figure 2



### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yee (2004/0161193) in view of Kadowaki et al (5,293,038).

**Regarding claim 2**, Yee discloses in figures 1 and 2 a laser oscillator comprising: a substrate (see Fig. 2, Character 1), which has a concave portion and a flat portion surrounding the concave portion; a first reflective mirror (see Fig. 2, Character 2; and a second reflective mirror (see Fig. 2, Character 4) provided at least on the surface of the concave portion of the substrate, wherein the first and the second reflective mirrors serve as a laser resonator.

Yee discloses the claimed invention except for a solid-state laser medium. However, it is well know in the art to apply the laser as discloses by Kadowaki in Column 4, Lines 7 – 8. Therefore, it would have been obvious to a person having ordinary skill in the art to apply the well know laser as suggested by Kadowaki to the laser oscillator of Yee, because it will to emitting a coherent or semi-monochromatic beam see Column 4, Lines 7 - 8 of Kadowaki.

**Regarding claim 3**, Yee disclose in Figures 1 and 2 a first reflective mirror (see Fig. 2 Character 2).

**Regarding claim 4**, Yee discloses a first reflective mirror (see Fig. 1, Character 2) is provided on another substrate (see Fig. 1, Character

3) which is bonded (see Fig. 1, Character 6).

***Allowable Subject Matter***

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Sun Harvey can be reached on (571) -272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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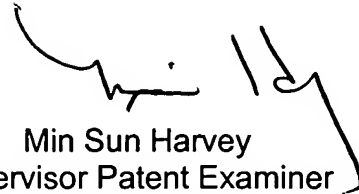
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you have questions on access to the Private PAIR system, contact the Electronic  
Business Center (EBC) at 866-217-9197 (toll-free).



Delma R. Flores Ruiz  
Examiner  
Art Unit 2828  
DRFR/MH  
January 30, 2006



Min Sun Harvey  
Supervisor Patent Examiner  
Art Unit 2828